Book Review

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1 Overview

Editors Łukasz Jędrzejowski and Przemysław Staniewski present the 131th instalment of the "Typological Studies in Language" series with their volume *The linguistics of olfaction: Typological and diachronic approaches to synchronic diversity*. The volume describes the ways in which olfaction is encoded in language, making it a curated compilation of typological accounts from a variety of languages, many under-represented in the literature. Most of the chapters focus on the lexicogrammatical structure of olfaction-related constructions and their development over time. The remaining chapters have a narrower focus that allows for a deeper examination of specific issues, such as in-depth diachronic analyses, or theoretical and methodological re-evaluations. This volume itself was born out of the 49th Annual Meeting of the Societas Linguistica Europea in Naples (August 31st–September 3rd, 2016), in particular the *Typology of Olfactory Expressions* workshop, of which Jędrzejowski and Staniewski were convenors together with Miaika Reetz. Both editors have extensive backgrounds on research of typological evidence, with Staniewski additionally publishing on olfaction specifically.

The linguistics of olfaction is the second dedicated perception-based volume in the series, after Koptjevskaja-Tamm's (2015) edited volume, *The linguistics of temperature*, and it reflects the growing linguistic inquiry into what are often dubbed as the 'lower senses', i.e., touch, taste, and smell. Yet, there is still much to be done. Majid (2021) gives an overview of the recent research, which not only defines the zeitgeist of research into human olfaction and its relationship to biology and culture, but also emphasises what questions still remain unanswered (p. 120). Many of these questions are foregrounded by the fact that there is not yet a comprehensive typological understanding of how speakers of different languages talk about smells. One particular question is how languages gain or lose olfactory vocabulary. The typological and diachronic perspectives collated in this volume show promise in demystifying such processes.

The remainder of this review is structured as follows: the next section gives an overview of the volume offering summaries of each of the chapters, followed by an evaluation of the volume overall, and finally, my concluding remarks and recommendations.

2 Volume structure

The volume comprises 15 chapters from 20 contributors. These chapters specifically investigate 46 languages with further references to many more, as listed in the language index. This index is followed by a separate subject index which acts as extensive guide to help readers navigate the breadth of topics covered in the volume. Although there are several entries that 'double-up' (e.g., 'source-based olfactory verbs' and 'source-based smell verbs', etc.) and other entries that are effectively redundant (i.e., 'smell') as they cover large swathes of chapters if not entire ones, this does not greatly diminish its overall value. Each of the chapters follows a relatively similar structure; full backgrounds and methodological details underpin the analyses, which are well supported by examples from a variety of sources, making each contribution a cohesive standalone piece.

The first chapter of this book, "Rendering what the nose perceives" by Jędrzejowski and Staniewski, gives the reader a broad introduction to the field and nicely supports the following contributions, each of which focuses on a particular language or group of languages. In this introduction, the volume editors canvass many topics, including lexical variation, metaphor, morphology and evidentiality as these, in different ways, inform the motivations for the volume and each of the chapters within. Here, they rationalise that the basis of the volume is to familiarise the reader with "the striking cross-linguistic peculiarities ... [to] help identify the far-reaching theoretical consequences that may follow from the typological picture" (p. 2).

In Chapter 2, "Why is smell so special? A case study of a European language: Swedish", Åke Viberg gives a more thorough background of his prior pioneering work (see Viberg 1983, 2001, 2015) on perception verb paradigms, providing a solid setup for future chapters. The bulk of the chapter demonstrates significant breadth in its discussion of the linguistic constructions and its relevance to the Swedish conceptualisation of smell as a moving entity, allowing for deeper analyses to be conducted in future works. The overarching contributions from the Swedish corpus-based study are its explication of the lexico-grammatical structure of the domain with word sketches, as well as the extended uses of the domain to make evaluations of things, achieved through source-based and environmental constructions. Viberg also examines nouns and adverbials associated with smell verbs, and the verbs and modifiers associated with smell nouns. This elegant

approach offers a wide range of implications, most notably on which smells are culturally and communicatively relevant, as well as how smells are conceptualised more generally.

Chapter 3 is "The domain of olfaction in Basque" by Iraide Ibarretxe-Antuñano. Her work in the area until now has mostly focused on the perception verb paradigms (1999, 2013, 2019) and she expands on this here by shifting focus from verbs to include nouns. Using a corpus-based methodology, the chapter investigates both the physical and figurative uses of different constructions as licensed by the inclusion of smell nouns, something verbs alone could not do. In doing so, the author insightfully demonstrates the relationship between certain physical and figurative senses. For instance, copulative perception tends to develop figurative meanings of referring to characteristics and feelings, while active and experience-based perception tends to develop meanings related to information, cognition, and searching. Ibarretxe-Antuñano then positions the findings in the cross-linguistic context and calls for a justifiably important reevaluation of the potentially overly purported negative associations and semantic deterioration of smell-related terms that have been shown across Europe (Buck 1949) and then spread beyond (Boisson 1997)—the "[Basque] data provide evidence against this tendency" (p. 105).

Next, in Chapter 4, "On olfactory terminology in Georgian and other Kartvelian languages", Manana Kobaidze, Revaz Tchantouria and Karina Vamling give an overview of the verbal perception paradigms (separating active, experienced-based and source-/phenomena-based perception) for the five perceptual modalities particularly in Georgian and related languages (particularly Megrelian). Georgian and Megrelian are shown to have many constructions available to describe sensory experiences and olfaction in particular. The constructions largely conform to cross-linguistic tendencies in that they cover the different categories of the perception paradigms, and at times share lexemes with the other modalities. The authors highlight various points of potential typological interest concerning polysemy (i.e., between modalities) and semantic change. One notable point of the latter is an example of semantic elevation from a negative term *q'ars'* it stinks' to a neutral term in some dialects, underscoring Ibarretxe-Antuñano's call, mentioned above, for linguists to reconsider the assumption that olfaction is driven towards the negative cross-linguistically, given this counterexample against deterioration.

In Chapter 5, "Let me count the ways it stinks: a typology of olfactory terms in Purepecha (Mexico)", Kate Bellamy looks at Purepecha, an isolate spoken in the central highlands of Michoacán, Mexico. Purepecha shows a wide lexicon for describing olfactory qualities which is mostly shared with taste, but commonly demarcated by specific pairs of spatial location suffixes exclusive to smell. This chapter also makes a vital methodological note as it compares three elicitation

methods: the Brief Smell Identification TestTM Booklet, a free-listing task, and a 'smell-jar' experiment, the last of which specifically selected a range of scents to match attested terms in Purepecha. Elicitation using the Brief Smell Identification TestTM Booklet (commonly used in cross-linguistic research) did not elicit many attested smell terms (O'Meara and Majid 2016 report similar findings in Seri). The free-listing task and the stimulus-based 'smell-jar' elicitation experiment, however, were more successful. Bellamy rightly emphasises that "olfactory terminology is more valuable when considered from a language- and culture-internal perspective" (p. 169). An additional highlight of the chapter was the historical perspective which showed that the types of smells encoded in Purepecha have remained relatively stable since the late sixteenth century.

In Chapter 6, "Olfactory, gustatory and tactile perception in Beja (North-Cushitic)", Martine Vanhove and Mohamed-Tahir Hamid Ahmed go beyond olfactory sensation to include also gustatory and tactile sensation in Beja, a language mainly spoken in Eastern Sudan. For each of these three senses, the authors provide a largely descriptive and, by their own admission, preliminary overview of the lexicon, the syntactic constructions used, and the metaphorical extensions of each sense, all supported by corpus examples and elicitations from the second coauthor. The methodological limitation of having elicited examples from a single speaker is noted, but it is a noticeable limitation, in comparison with several chapters with richer elicitation methods. Nevertheless, this chapter proves to be a solid overview of how Beja speakers describe sensory experience across these three senses. In many ways, Beja is typologically like other languages in this domain, and follows many tendencies that have been discussed through the volume and beyond. A novel contribution is that metaphors of guessing or suspicion, commonly associated with olfaction cross-linguistically, use taste instead, prompting further investigation.

A Kwa language spoken mostly in Southern Benin is the focus of Chapter 7, "How to smell without a verb "to smell" in Fon". As Renée Lambert-Brétière notes here, Fon is a language without a dedicated verb for 'to smell'. The chapter thus explores how Fon speakers express olfactory perception to compensate for such a lexical gap, as well as looking at nominal constructions and selected metaphorical extensions. Although the Fon language seemingly does not elaborate the domain of olfaction to the degree of other senses, the typological implications of this chapter will be of interest to many; for instance, Fon's use of ideophones, serial verb constructions, the types of genitive constructions available (and contexts in which they appear), and the metaphorical extensions from olfaction to the domains of love, hate, and shame.

In Chapter 8, "How to talk about smell in Japanese", Anthony E. Backhouse details the Japanese olfactory lexicon, looking across multiple word classes and

registers, with the support of corpus examples. There is a limited range of lexical elaboration across Japanese verbs, nouns, and adjectives, but Backhouse provides depth by detailing collocational distributions and morphological patterning of these terms. The chapter also discusses three 'mimetics'/ideophones and their variants employed to describe olfactory (and intro-mouth) perception, adding to the volume's growing list of languages with olfactory ideophones. Finally, there is a discussion on stylistically restricted smell terms, such as *kaguwashii*, a poetic term meaning 'pleasant smell'. A common theme found in Japanese, much like many other languages, is that olfaction is largely described in terms of its hedonic valence, intensity, and pervasiveness.

Amy Pei-jung Lee continues in Chapter 9, "An overview of olfactory expressions in Formosan languages", expanding her prior work (Lee 2010, 2015) to look at all Formosan languages spoken in Taiwan. After detailing the use of generic abstract smell terms, she then discusses the specific abstract terms, in which some languages, such as Amis and Puyuma, are comparatively highly elaborated. Many shared meanings between these languages are common to other languages with elaborated olfactory lexicons, i.e., 'armpit smell', 'to smell of rotten meat', 'to smell of raw fish/seafood', 'to have a smell of urine' (see, for example, Boisson 1997), while other terms appear to be less typologically common, i.e., 'to smell of burned rice', and importantly may reflect culturally prominent odourants. The Formosan languages also have a few source-oriented strategies to describe specific smells, such as deriving a verb from a noun using a reduplication schema, or periphrastically, with verbs such as 'to be like' or 'to exist'. Interestingly, the role of taboo, politeness and visibility of the odourant play a role in determining which strategy is used, although the polarity of these factors differs between languages.

Chapter 10, "Olfactory words in northern Vanuatu. *Langue vs. parole*", by Alexandre François, covers the domain of olfaction in a number of Oceanic languages spoken in northern Vanuatu. By mostly using corpora, the chapter demonstrates that most languages in this region do not show a notable lexical elaboration compared to other senses. François, however, notes one exception: Mota. This language not only has more generic olfactory lexemes, but also a sizeable set of qualitative descriptors for both pleasant and unpleasant smells (see p. 291). François proposes that Mota's seemingly exceptional nature "is not so much due to a contrast between languages, but rather to the difference between data collection approaches" (p. 282): unlike other languages investigated in this chapter, The Mota dictionary (Codrington and Palmer 1896) was compiled based on speaker knowledge, but data from François' corpora of other languages is a compilation of speaker use. So, Mota's unusual behaviour may be better explained by categorising data collection methods by considering the Saussurean distinction of *langue* (the available linguistic resources) vs. *parole* (the language use). Mota

has a documented and elaborated lexicon for smells, but this cannot be directly compared to the non-use of unattested but potentially existing olfactory lexicons in neighbouring languages.

In Chapter 11, "Alternation smell in Modern Hebrew", Bar Avineri gives a thorough investigation into Modern Hebrew. The primary focus of the chapter is on the verb *le-hariax* 'to smell', and its alternations of voice (active vs. middle) and complement clause type (finite clause vs. non-finite small-clause) and the semantic properties that these entail (e.g., factivity, belief information, (in)direct perception, (non-)literalness). These alternations are not exclusive to olfaction and are compared to the verbs of other modalities. The findings discussed in this chapter lead Avineri to propose a compositional semantic account to show how this reflects the hierarchy of lexicalisation developed by Viberg (1983). Further, the chapter introduces a diachronic dimension, exemplifying some of the changes from Biblical Hebrew to Modern Hebrew; it postulates the potential influences from various contact languages, and concludes by calling for further research on the topic.

Next, in Chapter 12, "Syntactic patterns for Romanian olfactive verbs", Virginia Hill discusses Romanian olfactory verbs and their two main meanings: the act of physical perception for direct evidence and cognitive/inferential processes for indirect evidence that is reported or inferred (as with other Romanian verbs of perception). In raising the question as to whether these meanings constitute one or two lexical entries, Hill falls on the side of a single entry with the meanings able to be differentiated through the syntactic configuration in mono- and bi-clausal structures, with added reference to the role of evidentiality. Finally, Hill notes the typological significance of the subject-to-object raising property of perception verbs in the Balkan area, a feature not shared by other Romance languages, or non-Balkan Slavic languages.

Chapter 13, "Smelling over time: The lexicon of olfaction from Latin to Italian", by Francesca Strik Lievers is the chapter with the most diachronic focus in the volume. Here, Strik Lievers compares the odour vocabularies (i.e., nouns, verbs, and adjectives) across Latin, Old Italian and Contemporary Italian. This study is motivated by the anthropological perspective of modern Western culture being 'deodorised' (see Majid 2021: 118 for discussion). Therefore, on this premise, the linguistic resources should reflect the cultural changes that occurred from Latin to the Italian of today, as it has been reported between German of the Middle Ages to Contemporary German (see Kutzelnigg 1984). Strik Lievers finds that while the size of the lexicon between these three varieties does not change significantly (cf. Chapter 5 on Purepecha), there are several internal changes regarding causation, hedonic valence, etc. in Italian, aligning with the 'deodorisation' of Europe throughout time.

In Chapter 14, "To what extent can source-based olfactory verbs be classified as copulas? The case of German and Polish", Staniewski and Adam Gołębiowski critically investigate whether German and Polish olfactory copulas are indeed copulative, as prior studies have perhaps too generously regarded them and their cross-linguistic equivalents (including accounts within this volume). The verbs under investigation here are German *duften* 'to be fragrant', *riechen* 'to smell' and *stinken* 'to stink', and Polish *pachnieć* 'to smell (nice)' and *śmierdzieć* 'to stink'. On the basis that copulative constructions are definitionally verbs that link subject and predicative, and crucially, do so without adding further semantic content, in most instances, the latter criterion precludes the investigated verbs from being classified as truly copulative. The authors do, however, note that the evidential readings can fall within the scope of a copular construction. This chapter significantly contributes to the theoretical understanding of the verbal paradigms of sensory perception, which commonly feature copulas, but the added nuances from this chapter call for the need to critically evaluate what makes a verb copulative.

In the final instalment, Chapter 15, "Typology of metaphors with the olfactory target domain in the Polish perfumery discourse", Magdalena Zawisławska and Marta Falkowska offer a typology of metaphors used in Polish perfumery discourse by integrating approaches from Cognitive Metaphor Theory and Fillmorean Frame Semantics. The authors show that perfumery discourse in Polish is rich in atypical metaphor types: mixed metaphors (those with multiple source frames), entangled metaphors (those with multiple source frames with conflicting syntactic dependencies at the semantic level), and narrative metaphors (those where a single, elaborated metaphor extends over the text). A significant focus of the chapter investigates synaesthetic metaphors, i.e., metaphors between perceptual modalities. And while the theoretical grounding of synaesthetic metaphors is potentially outdated, or at least not discussed entirely critically in the current chapter (see Winter 2019 on the so-called synaesthetic metaphors being neither synaesthetic nor metaphorical), the authors nevertheless offer a comprehensive picture of the nature of Polish perfumery discourse and rightly emphasise the need for further nuance in the field.

3 Further evaluation and additional contributions

This volume delivers on its aims, using typological and diachronic perspectives to account for the diversity in how smells are encoded into language and how people draw on those linguistic resources. This section further evaluates the volume overall, its content and cohesiveness, before commenting on the chapters as separate works, their writing-style and focus. Finally, this section highlights three

important theoretical and methodological discussions in the field that this volume informatively contributes to; these are not necessarily the primary focus of the volume but are nevertheless common themes throughout the chapters.

Across the volume, many of the chapters have a similar approach, looking at verbal paradigms (and, at times, other classes) within their respective languages. Each chapter additionally branches off from the core approach, focusing on various features of typological interest, such as figurative extensions. This combination of a core focus common to most chapters and then additional points of interest offers depth and breadth to the volume. The core elements provide a substantial contribution and make for a thorough collection of comparable data, a boon to the editors' goals for the volume. The remaining chapters tackle more independent questions, which allows for further testing of methodological and theoretical issues in the field. Historical aspects of the olfactory journey provide a common theme throughout the volume. However, while some chapters offer thorough diachronic accounts of theoretical and methodological significance (of note. Chapter 13 by Strik Lievers and Chapter 2 by Ibarretxe-Antuñano), in others the information is comparatively tangential, only acknowledged towards the end of each chapter. This imbalance is unfortunate, given the importance of the diachronic dimension (acknowledged in the title of the volume).

Individually, each chapter is well-written, with only a handful of typographical errors or inconsistencies, certainly nothing that would impede understanding. All authors provide generous detail, often referring readers to additional works that are relevant but beyond the scope of the given chapter. While the writing styles of some authors at times can lean towards dense, overall, the chapters are written with clarity, allowing accessibility to non-expert readers of the field. Occasionally authors use multiple terms for similar features, and these are not always used consistently cross the chapters (e.g., *phenomena-based*, and *source-based* perception verbs, among others); however, each chapter is internally consistent, and their choices are explained and supported.

While many of the chapters demonstrate extensive fieldwork, especially for the languages presented that are mostly under-studied, all the chapters show how a range of methodologies/data sources can be used. The majority of them drew from dictionaries and corpora providing naturalistic examples of how olfaction is spoken about, even when speaking of olfaction is often rare cross-linguistically (San Roque et al. 2015). The drawback to this is that quite often the rarer phenomena are unable to be fully explicated due to their low frequency. Even still, most of the corpus-based chapters have a lot to offer typologists, historical linguists, anthropologists alike—indeed, anyone with an interest in the linguistic expression of olfaction. Other data sources include elicitation methods, which can address these rarer phenomena closer. As noted in the previous section, the

samples of elicitation data vary dramatically between chapters, and it is difficult to ascertain how much this affects the conclusions made. For the chapters with richer available data sources, the findings are well-supported.

The chapters by Bellamy, François and Strik Lievers further raise an important methodological issue in the olfactory studies; namely, the importance of separating the linguistic resources available to speakers and the frequency of their use. This has been a challenge faced by many of the publications that report on olfactory lexicons, particularly the descriptive or qualitative lexicons in languages. The tradition set by the Berlin and Kay's (1969) World Color Survey emphasises the importance of consistent stimuli for elicitation, and this importance is demonstrated in cross-linguistic studies (Majid et al. 2018). However, these cross-cultural stimuli sets have been shown to be of varying success in eliciting known olfactory terms (see O'Meara and Majid 2016). Bellamy explicitly compares different types of elicitation methodologies, as mentioned in the summary above, and shows the importance of free-listing methods as well as targeted stimuli. This chapter should prove important in guiding the methodologies and approaches of future studies. The chapters by François and Strik Lievers also address the related issue that one cannot conflate a lack of use of a potentially unreported olfactory lexicon with a lack of the lexicon itself. Together these chapters effectively call for future studies to acknowledge the cross-tabulation of two main factors; whether speakers often describe smells and whether a language has an olfactory lexicon.

A second key theme concerns the relationship between olfaction and hedonic valence. While there is no disputing the relevance of these two domains, Ibarretxe-Antuñano challenges the prevalent assumption that the domain of olfaction has cross-linguistic negative connotations. Examples of pejoration are common through this volume, although they are at times treated "with caution required" (p. 397), as Strik Lievers puts it. Ibarretxe-Antuñano cites Basque as a counterexample; not only does it lack the negative associations commonly accompanying olfactory language, but it also provides an example of the semantic amelioration of a previously negative olfactory term (discussed on p. 102; an additional potential counterexample is provided by Avineri in Chapter 11: p. 331). The chapter describes two issues with the purported negative universal connotation of olfaction (pp. 105-106): (1) "this type of analysis ignores the linguistic context as well as the pragmatic affordances in which the smell word is used" (p. 105), e.g., compare the value of smell in I smell trouble and I smell triumph; and (2) even though most cultures conceptualise olfactory phenomena in terms of their hedonic valence, the qualities that are associated with each pole are not cross-culturally consistent. Both points question the objectivity with which olfactory terms are presented in the existing literature and call for careful reconsideration of connotation, as hedonic valence is so pervasive in the field of olfaction. This pervasiveness is further demonstrated by frequency of discussion on hedonic valence throughout the volume, appearing practically in every chapter to varying degrees.

A third common theme, which I believe to be extremely relevant to the future of olfactory linguistics, is that of olfactory ideophones (sometimes referred to in this volume as 'mimetics' or sometimes more specifically as 'ophresaesthemes', also as another example of mixed terminology) as highlighted in the introduction (p. 5). Dingemanse (2019) defines the class of ideophones on the basis of five criteria: open lexical class, structurally marked, conventionalised, depictive, and sensory. This multidimensional definition alone highlights the importance of ideophones to any study on the linguistics representation of sensory perception, and as mentioned in the introduction, several languages have their olfactory lexicon fall under the class of ideophones. The contributions made in this volume add to this body of work. Chapters 2, 7, and 8 (Basque, Fon, and Japanese, respectively) each discuss the olfactory ideophonic inventories in these languages. As the list of languages with olfactory ideophones grows with this instalment, the field rightly moves toward being able to give a thorough, comprehensive cross-linguistic account of these lexicons, something that is essential to completing the 'unified typology' identified by the editors.

4 Final comments

Overall, editors Jedrzejowski and Staniewski, and the individual authors of the chapters, have demonstrated their awareness that the field of olfactory linguistics, despite many milestone works, is still very much in its infancy—there is yet a lot of work to be done on a domain that remains quite elusive. Jedrzejowski and Staniewski are also mindful of what needs to be done in the field to synthesise these findings. They importantly call for "a unified typological and diachronic account of odor terms" (p. 26) and, to that extent, this volume as a collation of resources will prove invaluable towards achieving this goal. In all, the volume clearly lays out the olfactory repertoires of the many languages investigated across the chapters in an accessible and comparable way. For those not immediately interested in the general typological significance of these chapters and interested in more of the specific subfield discussions (e.g., cultural discussions, language change, etc.), then these are still available, well-signposted (with or without a mostly useful index) and explained. In conclusion, I commend the editors and the authors on their valuable contributions to this volume and the field.

The linguistics of olfaction will be of interest to a wide audience both within linguistics and beyond. Naturally, (lexico-grammatical) typologists have the most to gain from this book, but there is also ample content relevant for linguists interested in metaphor, ideophones, cognitive linguistics, evidentiality, lexicology, and language change. I also recommend this volume to any anthropologists, historians and cognitive scientists who have an interest in human olfaction and would like to know how smells are encoded across languages, and how this may change (or not change) over time.

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